



GIAC GPS INTERAGENCY ADVISORY COUNCIL

September 25, 1998

MEMORANDUM FOR: Arthur L. Money, IGEB Co-Chair
Office of the Assistant Secretary of Defense
Department of Defense

Mortimer L. Downey, IGEB Co-Chair
Deputy Secretary of Transportation
Department of Transportation

FROM: Charles W. Challstrom
Chair, GPS Interagency Advisory Council

SUBJECT: GPS Modernization

At the September 15, 1998, meeting of the GPS Interagency Advisory Council (GIAC), discussions centered on issues associated with GPS Modernization. As you probably know, the GIAC was formed in 1995 by an exchange of letters between the Secretary of Interior and the Secretary of Transportation to represent the non-transportation users of GPS. I believe this memorandum accurately describes the consensus view of the GIAC membership and is provided for your consideration.

1. Set Selective Availability (SA) to a zero state immediately.
We do not believe SA provides additional national security sufficient to warrant its continuation. To the contrary, the continuation of SA only serves to delay acceptance of GPS as the international foundation for positioning and timing systems, and may, therefore, pose a greater risk to national security.

2. Implement a civil C/A code, similar to that of L1, on L2 as soon as possible.

We recommend modification of the last twelve IIR satellites and the first six IIF satellites to provide a C/A-centered signal on L2 at the earliest opportunity. The basis of this recommendation is our concern that sufficient dual-frequency GPS signals will not be available to the civil sector by the solar maximum expected in 2011-2012. Furthermore, early fielding of a civil signal at L2 will significantly increase the utility of GPS and increase its acceptance as an international standard.

3. Identify a third civil signal suitable for use by aviation that, when used in conjunction with civil signals on L1 and L2,
supports long-distance
precise differential
positioning.

We accept and support the Federal Aviation Administration's requirement for a second

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GPS signal in a band with an

Aeronautical Radio Navigation Service (ARNS) allocation. However, the frequency selection of this third signal must also support the establishment of a nationwide precise (centimeter-level) positioning capability. If this third signal is not implemented, we are certain a competitive system, either private or foreign, will replace GPS as the international system of choice.

4. Define a national funding strategy to assure GPS will continue.

We are greatly concerned by recent activities associated with funding for GPS and its government-provided augmentations. They indicate a lack of understanding for our nation's dependency on the services provided by GPS in our day-to-day activities. Due to the importance of GPS, its funding process must not be reliant on multi-departmental funding mechanisms. A joint committee mechanism, similar to that used for government printing, should be implemented to provide a completely unified funding process and best support IGEB policy decisions.

5. Increase the effort to retain GPS spectrum.

There is a serious threat to the utility of GPS from communications systems that are competing for GPS spectrum. GPS spectrum issues must have the highest level of support from all agencies involved in radio spectrum allocation and agencies that use GPS to accomplish their missions.

We are aware that there are significant funding issues associated with some of these goals, and many IGEB agencies have not had sufficient time to develop budget initiatives to support the near-term funding requirements. Concerned that policy decisions may be unduly affected by agency budget competition, we felt it necessary to explicitly state what is in the best interests of the Nation, our agencies, and our constituents. The GIAC membership will continue to support activities to achieve these goals to the fullest extent possible. Your due consideration of these goals is requested.

cc:

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Robert Bell, National Security Council
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D. James Baker, Department of Commerce
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